

## I. Regulation/Standard Issues

### Compatibility:

**GM/Toyota Collaborative Research Changes Direction** – GM and Toyota reviewed evaluation results from full scale vehicle-to-vehicle (VtV) and vehicle-to-MDB tests and final conclusions are not favorable to the MDB; specifically, it is deficient in its replication of passenger car crush and powertrain kinetics. TMA will work with GM to draft a brief presentation of the research status to the Enhanced Vehicle-to-Vehicle Crash Compatibility management committee and detailed presentations for future briefings of the TWG and NHTSA. Agreement was also reached to change direction to examine the potential benefits of researching the Toyota offset deformable barrier (ODB). GM and TMA will also meet in August to review the background of the Toyota ODB development and form a research plan.

**Front-to-Front TWG NHTSA Briefing** – NHTSA requested a status briefing from the FtF TWG including research to date and plans for future research. It is expected that NHTSA will provide an update of its research program and plans for either consumer information or regulatory action related to compatibility.

**FMVSS 208: NHTSA Grants Lockability Petition** – NHTSA granted the *SafetyBeltSafe, U.S.A.* (safety advocacy group financially supported in part by TMS) petition for rulemaking requesting NHTSA to remove the sunset clause in FMVSS 208 that rescinds a lockability (ALR) requirement of seat belts in LATCH seating positions after September 1, 2012. Granting of the petition means NHTSA will further review the issues raised in the petition and open rulemaking; however, the determination of whether to issue a rule or terminate rulemaking will be made in the course of the rulemaking process.

### LATCH-CRS Issues:

**Alliance WG Reviews Transport Canada Presentation on CRS Restraint for Heavier Child** – Transport Canada's (TC) Chief of Crashworthiness Research, Suzanne Tylko, attended a meeting of the Alliance-AIAM-JPMA joint LATCH WG to review TC preliminary research findings of CRS restraint effectiveness for heavier (6-year-old+) children using LATCH, vehicle belts, or both simultaneously. Contrary to recommended practice, Ms. Tylko suggests usage of the LATCH system in conjunction with the vehicle belts to restrain the CRS when the child occupant weighs more than 48 pounds and continues to use a forward-facing internal harness, as her results show the least amount of excursion with this configuration in high-speed frontal crash tests.

**Alliance WG to Investigate Labeling of LATCH Anchor Locations** – As part of its commitment to respond to concerns from the NHTSA Public Meeting in February 2007, the Alliance WG is discussing potential measures to improve the labeling of LATCH anchor locations in vehicles. Although this particular activity is in preliminary stages, the WG goal is to formulate voluntary recommendations for anchor labeling beyond the FMVSS requirements.

**FMVSS 126, ESC Telltale Final Rule--Technical Correction** – As a partial response to the Alliance's petition for reconsideration, the NHTSA issued a technical correction delaying the ESC malfunction telltale (S5.3.3) and the "ESC Off" ancillary effects requirements (S5.4.3) until September 1, 2011, as the agency had intended. As a follow-up to the Alliance's petition for

reconsideration, the Alliance is drafting supplementary information with regards to the 4x4 Low and low speed threshold issues.

**FMVSS 138, TPMS Response to Alliance Petition**– NHTSA issued a notice which grants the Alliance's petition for reconsideration of the FMVSS 138 rule by amending the regulatory language to permit multiple malfunction flashing sequences during one ignition cycle. NHTSA also changed the test procedure wording to allow only one malfunction to be tested per ignition cycle. This rule change relieves the industry from unnecessary costly redesigns of TPMS warning system algorithms.

## **II. Other Issues**

**ESV Safety Conference** – TMA (Ms. Mullen and Mr. H. Kato) attended the 20th ESV conference held in Lyon, France. Participation was broad with attendees from NHTSA (10+, incl. Administrator Nason, Ron Medford, etc.), most OEMs, safety advocates, and researchers from all over the world. Passive safety issues dominated the sessions and papers; however, the plenary session's invited speakers noted that for the future, 'total safety' should be the new focus (drivers' behavior, road environment, and technology (active and passive)). In addition, TMA, TMC and GM took the opportunity to meet privately to update our progress on the CAT project compatibility work.

**Mercedes-Benz Emergency Stopping System (ESS) Exemption and Study**– TMA-DC contacted MBenz U.S. and learned that they had partnered with State Farm Insurance Company to collect crash data on their FMVSS-exempted vehicles equipped with the flashing brake lamps (2-year exemption set to expire in January 2008). Also, MBenz said they believe that currently they have insufficient data to justify petitioning for a rule change, therefore, they plan to request an extension to their exemption later this Fall. TMA-DC reviewed the information MBenz had submitted to obtain the exemption and is currently working with TMC-GA and 24F to develop a strategy for a future rule change to allow introduction of similar Toyota ESS technology.

**ATD Artifact: H-III AF05 Spine Box Metal Contact** – TMC met with TMA-DC and discussed a potential durability issue that TMC discovered with the HIII AF05 spine box. In its internal evaluations, TMC found that when the bolts connecting the spine box to the lower bracket were loosened, erroneous high chest g values occurred during a simulated 35 mph belted FRB test (FMVSS 208 phase II). Existing NHTSA data shows this phenomenon occurring in tests with other OEM vehicles. As such, TMA-DC requested comments and supplemental data from industry colleagues to prepare for Alliance discussions and eventual NHTSA briefing on this issue by Fall 2007.

**Breath Alcohol Tester; NHTSA Publishes New Calibration Specs** – NHTSA published a notice that amends the Model Specifications for Calibrating Units for Breath Alcohol Testers by adopting an alternative test procedure. The notice also updates the Conforming Products List (CPL) with 22 new listings.

**Alcohol Interlock Public Meeting Announced** – NHTSA published a notice announcing an August 22<sup>nd</sup> public meeting to provide an opportunity for judges, court personnel, treatment professionals and others to discuss issues relating to the use of ignition interlocks by impaired driving offenders, including, but not limited to: (1) technological issues; (2) legal issues; (3) current barriers to the use of ignition interlocks and (4) issues relating to training and education. TMA plans to attend and report.

**VII WG Meeting** – TMA attended the VII WG meeting with over 40 representatives from federal/state governments, OEMs, and contractors. USDOT is promoting frequent communications among VII stakeholders, and proposed a WG/ELT joint meeting in August/September to discuss post POC, viability criteria, and other critical issues. There is growing dissatisfaction among some OEMs with the current USDOT approach under newly assigned ITS JPO Director Shelley Row for lack of prior consultations with OEMs.

**Update: FCC 77 GHz (Stationary Vehicle Radar Emission)** – As part of the overall strategy to get TMC's newest radar-based features into the US, TMA researched the background of the FCC 77GHz rule for TMC. As a result of the 1996 Telecommunication Act, Congress authorized FCC to regulate RF (radio frequency) exposure limits, so the FCC adopted stricter guidelines for RF Maximum Permissible Exposure (MPE) and SAR (Specific Absorption Rate). For mobile devices (e.g. vehicle radar), the FCC limits RF to 1.0 mW/cm<sup>2</sup> for the general environment, and so TMA is now inquiring of TMC's engineers as to how the limits apply to TMC's system. TMA is also completing a review of the IEEE standard (which was the basis of the 77GHz rule), which delineates adverse effects of RF exposure based on scientific evidence.

### **FCC**

**77GHz( )** 77GHz TMA FCC  
RF( ) FCC 1996 FCC  
MPE SAR  
一般環境制限値は1.0mW/cm<sup>2</sup> TMA TMC  
TMA 77GHz RF IEEE

### **III. Quality/Compliance Issues**

**NHTSA Investigation on Lexus ES350 All Weather Floor Mats** – NHTSA is continuing their investigation regarding alleged interference of the floor mats with the accelerator pedal. In late July, NHTSA is scheduled to inspect a vehicle that belongs to an individual that is involved in a lawsuit with Toyota over a sudden acceleration event.

**NHTSA Investigation on Sienna Liftgate Support Struts** – NHTSA has issued three peer vehicle IR letters. These letters were sent to Chrysler, Nissan, and Honda, and their responses are due in August. Ford has recently responded to a peer vehicle IR from NHTSA on this issue. After some recent discussions with ODI, TMA will be informed when TMA may have access to all of the peer vehicle IR responses.

**Peer Vehicle IR - GM Trailer Hitches** – TMA submitted the response to NHTSA's peer vehicle inquiry regarding PE07-025, an investigation into 2002 MY GM C/K 2500 pickups and SUVs. In the response, Toyota provide field data on Tundra and Sequoias for NHTSA to use in comparison to the GM products. Toyota has received complaints from owners of 2 vehicles among the population of over 129,000 peer Sequoias and Tundras in the data submitted.

**Foreign Recall Report – Prius Side Airbags** – TMA submitted a Foreign Recall Report (FRR) regarding an issue with 10 Toyota Prius vehicles built at Sichuan FAW Toyota Motor Co.,Ltd. [SFTM] for the Chinese market. The issue is limited only to vehicles built at SFTM, which are not imported into the US. Due to error in production, there is the possibility that some curtain

shield airbags may have been improperly assembled to the vehicles, with the airbag twisted 360 degrees which could result in insufficient inflation in the event of a collision.

#### IV. Assessment

**NHTSA Scion xB Frontal/Side NCAP Ratings** – Although TMC expressed concerns about the test setup and validity of NHTSA's recent Scion xB frontal NCAP test, TMA felt that the arguments were not robust enough at this time to argue the issue, and so TMC agreed to the public release of the final frontal and side NCAP results (Front - 4/4 Stars vs. the expected 5/5, Side - 5/5). TMA contacted NHTSA and informed them that although Toyota will not contest the test results at this time, Toyota remains concerned about the test setup and how it could affect the results. TMA provided TMC with test setup information, and TMC is still reviewing the data for potential future discussions with NHTSA to avoid challenges on upcoming tests.

**IIHS Releases Ratings for Rear Crash Performance** - Amongst the SUV, pickup, and minivan seats they tested, 21 were "Good", 12 were "Acceptable", and 54 are "Marginal" or "Poor". Of particular note, for pickups, the Toyota Tundra was the only model which received a "Good" (IIHS also noted the improvement over last year's model). Of the SUVs and minivans, Honda/Acura, and Ford improved several of their seats' performance.

**IIHS Moves Forward on Pickup Truck Testing for 'Top Safety Pick'** – As TMA had noted in prior reports, TMA had aggressively pushed IIHS to include pickup trucks in their next test series to allow the Tundra to be tested for a TSP. After some internal discussions, IIHS finally agreed, and sent TMA an official letter asking that Toyota reimburse them for the purchase of a Tundra for the side impact test. The test is scheduled for August 28<sup>th</sup>, and TMA is confirming the vehicle specs and other details.

**NHTSA Annual Compliance and Buying a Safer Car Brochure Submissions** - TMA reviewed and submitted the annual submissions regarding carryover models and safety features, and worked with TMC-PA to correct errors. From our submission information, NHTSA has promised a one week response turnaround, which will include the official vehicle star ratings to be used on window stickers (per 'Stars on Cars') this Fall.

**NHTSA Stars on Cars Information** –TMA received the official vehicle rating list from NHTSA. There were several small issues with the ratings. The Solara was not given a carryover rating for rollover, and the ES350 with rear seat side airbags was not rated for side impact results when it was tested last year. TMA is responding to NHTSA's letter with these issues clarified.

**IIHS 4Runner Side Impact Test** - TMC (Hino) and TMA attended the test at IIHS, and the test results were as expected. The injury numbers were all "Good", intrusion was "Acceptable", and therefore it is likely that the rating should be a "Good".

#### V. Research

**FTSS Acquisition of Denton Terminated** – The potential FTSS (First Technology Safety Systems) acquisition of Denton ATD is now terminated; both companies are major dummy manufacturers. During the past months, there were discussions of a potential FTSS acquisition of Denton in which the FTSS holding company would acquire capital stock of all Denton

companies. The European Commission expressed concerns of anti-trust during its initial investigation and as such, FTSS and Denton agreed to terminate the acquisition.

**Alliance Considers FY 2008 Research Project Proposals** – The Alliance Safety Research Subcommittee met to review proposals under consideration for fiscal year 2008 funding. Two biomechanics proposals are under review including development of new side impact injury risk curves and evaluation of the response of the human neck to dynamic loading. In addition, funding is requested to support a pilot study to assess the future of child occupant field data collection and support efforts to obtain sustainable federal funds. Strategy documents for all proposals will be drafted for management review in August.

**UMTRI Crash Reports** – UMTRI posted fifteen new case reports from its Alliance sponsored crash investigation program onto the UMTRI crash reports website. All crash reports are available online as CD-ROM distribution is discontinued.



#### **CIREN:**

**Toyota Continues CIREN Sponsorship** – Per contractual requirements, TMA submitted formal notice of its intention to continue sponsoring the Toyota Wake Forest School of Medicine CIREN center for at least 1 more year. In addition, TMA will retain access to the CIREN network through its in-house data terminal.

**CIREN Collaborative Activities** – TMA-DC is collaborating with TMC in acquiring information from specific CIREN cases for research purposes using the CIREN database terminal at TMA-DC. TMA-DC also continues its cooperative relationship with the Toyota Wake Forest University (WFU) CIREN Center as WFU requested specific information from Toyota regarding EDR data downloads from Toyota vehicles from its crash investigations. TMS provided TMA-DC with a current list of vehicles with EDR capabilities to support TMA-DC in collaborative work with WFU and other special external requests.

**ACAT Workshop** – Toyota's ACAT team (TMC and TMA) met with NHTSA at the first workshop required under our ACAT contract work. The meeting included all the other teams (i.e. Honda/DRI (PCS), Ford/Volvo/UMTRI (LDW), and GM/VTTI (backover)), where each presented its general approach to the SIM (Safety Impact Methodology) development. Afterwards, TMC and TMA discussed future direction and strategy for further improvement of the projects, including improved TMC coordination, presentations, and consideration of outside help to prepare material prior to submission. NHTSA requested that TMC summarize its driver-model concept by mid-July to be discussed at the next Toyota/NHTSA monthly meeting scheduled for the end of July.

#### **VI. Competitor/Media**

**Active Safety Article** – *Detroit News* reported on the annual Electronics University, a Siemens VDO media event to brief the media on active safety technology. Their night vision system drew the most attention, which projects a hologram-like image that shows objects along the roadside from a single infrared camera. Siemens also displayed a demo car equipped with ACC, LDWS with camera, and High-beam assistance.



**VII. NHTSA Interpretations**

No significant interpretations issued this month.